

# Vibronic

## Point level detection

### Soliphant FTM51

Robust point level switch with extension tube for fine-grained bulk solids also for hazardous areas



More information and current pricing:

[www.casc.endress.com/FTM51](http://www.casc.endress.com/FTM51)

#### Benefits:

- SIL2 in accordance with IEC 61508
- No mechanically moved parts, free of maintenance
- Measurement not affected by build-up or external vibration
- Various electronic inserts: e.g. NAMUR, relay, thyristor and PFM-signal outputs for optimum alignment with the plant control system
- Build-up and abrasion display selectable, density setting and switching delay selectable
- Choice of coated or polished sensor
- Build-up and corrosion detection

#### Specs at a glance

- **Process temperature** -50°C ... 280°C (-60 °F ... 540°F)
- **Process pressure absolute / max. overpressure limit** Vacuum ... 25 bar (Vacuum ... 360 psi)
- **Min. density of medium** 10 g/l (8 g/l on request)

**Field of application:** Soliphant FTM51 is a robust point level switch for use in silos containing fine-grained or powdery solids even with a low bulk density. Suitable for a wide range of applications with international certificates for use in dust or gas hazardous areas. Available with polished fork and stainless steel housing with Tri-Clamp or with aluminum housing and coated fork. Maintenance-free device for use in typical applications like: cereals, flour, cocoa, sugar, animal feed, dye powder, chalk.

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## Features and specifications

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### Point Level / Solids

**Measuring principle**

Vibration Solids

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**Characteristic / Application**

Point level switch for fine grained solids and powder

Fork sensor

Universal

No calibration required

Not affected by build-up or external vibration

Robust

Switch value visible from outside

Tube extension

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**Specialities**

Build-up and corrosion detection

Remote version

3 temperature versions available

SIL 2

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**Supply / Communication**

DC PNP 3-wire

AC 2-wire

19...253V AC / 19V...55V DC 2 relay contact

8/16mA

NAMUR

PFM

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**Ambient temperature**

-50°C ... 70°C

(-60°F ... 160 °F)

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**Process temperature**

-50°C ... 280°C

(-60 °F ... 540°F)

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**Point Level / Solids****Process pressure absolute / max. overpressure limit**

Vacuum ... 25 bar  
(Vacuum ... 360 psi)

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**Min. density of medium**

10 g/l (8 g/l on request)

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**Main wetted parts**

selectable:

316L 3,2 µm

316L 0,8 µm

316L PTFE coated (to avoid build-up)

316L ETFE coated (to avoid corrosion)

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**Process connection**

Thread

R 1 1/2"

1 1/4" NPT

1 1/2" NPT

EN Flange DN50...DN100

ASME Flange 2"...4"

JIS Flange 50A...100A

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**Process connection hygienic**

Tri-Clamp ISO2852

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**Sensor length**

300 ... 4000mm

(12 ... 155")

(6000mm / 230" on request)

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**Communication**

DC PNP 2-wire

AC Thyristor

DPDT relay

8/16mA

NAMUR

PFM

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## Point Level / Solids

### Certificates / Approvals

ATEX, FM, CSA, CSA C/US, IEC Ex, JPN, INMETRO, NEPSI, EAC

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### Safety approvals

SIL

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### Design approvals

EN 10204-3.1

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### Options

Glass cover  
Temperature spacer  
EN10204-3.1

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### Components

PFM: FTL325P, FTL375P  
NAMUR: FTL325N, FTL375N

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### Application limits

Grain size > 10mm (0.4")

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More information [www.casc.endress.com/FTM51](http://www.casc.endress.com/FTM51)